ABSTRACT

The present invention provides nucleic acid arrays with improved sensitivity for a nucleic acid. The array comprises various kinds of nucleic acid probes, which are capable of hybridizing to the nucleic acid, immobilized at different positions on a substrate. Single-stranded nucleic acid probes are immobilized on the substrate by covalent bond, and functional groups that can have negative charge by dissociating in an aqueous solution or by hydrolysis are introduced on the surface of regions of the substrate on which no nucleic acid probe is immobilized.